GREYSTONE
ENERGY SYSTEMS INC

The RH210 series uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and Platinum RTD temperature sensor together with state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensors are encapsulated in a 228.60 mm (9") long by 12.7 mm (0.5") diameter S/S probe. A 60 micron HDPE filter protects the sensor for contaminants.

SPECIFICATION:

Humidity Sensor Type:..................Thermoset polymer based capacitive
Accuracy at 25˚C:.............................±2, 3, or 5% RH, (5% to 95% RH)
Measurement Range:....................0 to 100% RH
Temperature Dependence:.........±0.05% RH/ ˚C
Hysteresis:..±1.5% RH maximum
Repeatability:...................................±0.5% RH typical
Linearity:...±0.5% RH typical
Stability:..±1% RH typical at 50% RH in 5 yrs.
Sensor Response Time:.................15 seconds typical
Sensitivity:...0.1% RH
Temperature Sensor Type:...........**C -** 1000 Ω Platinum. IEC751, 385 Alpha, thin film, ±0.3˚C @ 0˚C
L - 100 Ω Platinum. IEC751, 385 Alpha, thin film, ±0.3˚C @ 0˚C
Accuracy:...±0.1% of span
Operating Temperature:...............-40˚ to 85˚C (-40˚ to 185˚F)
Operating Humidity:......................0 to 95% RH non-condensing
Power Supply:..................................18 to 35 Vdc, 15 to 26 Vac
Consumption:...................................22 mA maximum
Input Voltage Effect:.......................Negligible over specified operating range
Protection Circuitry:.......................Reverse voltage protected and output limited
Output Signal:..................................4-20 mA current loop, 0-1, 0-5 or 0-10 Vdc
Output Drive at 24 Vdc:.................550 ohms max for current output 10K ohms min for voltage output
Internal Adjustments:....................Clearly marked ZERO and SPAN pots
Wiring Connections:.......................Screw terminal block (14 to 22 AWG)
Enclosure:..Standard - ABS - UL94-5VB - IP61 (NEMA 2)

*In order to maintain the published NEMA/IP ratings, properly rated conduit or cable gland adapters must be used.

Probe:...304 series stainless steel w/ 60 micron HDPE filter

PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
RH210A	Duct Humidity/Temperature Transmitter

CODE	RH Accuracy
02	2%
03	3%
05	5%

CODE	Temperature Sensor
C	1000 Ω Platinum, Class B, ±0.3˚C @ 0˚C
L	100 Ω Platinum, Class B, ±0.3˚C @ 0˚C

CODE	Output Signals (RH and Temperature)
2A	4-20 mA
2D	0-5 Vdc
2E	0-10 Vdc

CODE	Scaled Temperature Range
1	0˚ - 35˚C (32˚ - 95˚F)
2	0˚ - 50˚C (32˚ - 122˚F)
*	Custom ranges available

Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

Custom Scaled Temperature Range:
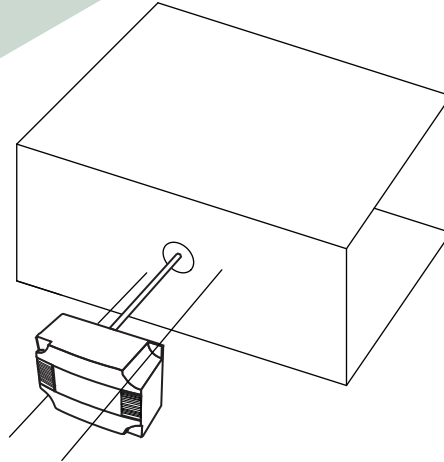
RoHS COMPLIANT

ISO9001

CE

TYPICAL INSTALLATION:

For complete installation and wiring details, please refer to the product installation instructions.
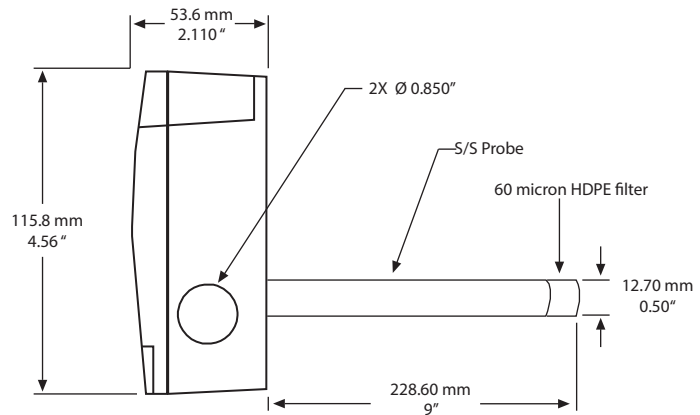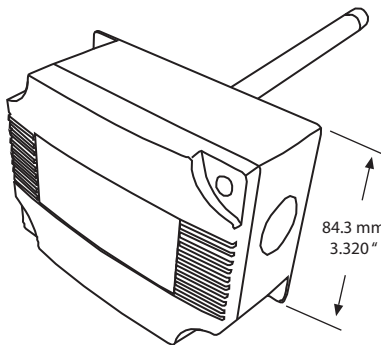
The duct type probes are installed through a hole in the side of the duct to monitor a single point humidity within the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

Mounting tabs on the outside of the enclosure for ease of installation .

A terminal block connection is provided. for connection to the Building Automation System.

DIMENSIONS:

84.3 mm
3.320 "

53.6 mm
2.110 "

115.8 mm
4.56 "

228.60 mm
9"

2X Ø 0.850"

S/S Probe

60 micron HDPE filter

12.70 mm
0.50"

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RoHS
COMPLIANT

Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems. We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.

GREYSTONE HAS AN **ISO 9001** REGISTERED QUALITY SYSTEM